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ABSTRACT

Discovering why adolescents take sexual risks, despite knowledge of consequences, is a vital first step in combating the problem. Optimistic bias, the misperception that one is less likely than others to experience negative consequences from health behaviors, offers a promising explanation for adolescents' sexual risk-taking. Unfortunately, optimistic bias research has over-emphasized convenient college student samples and neglected adolescents and minority populations targeted with the actual campaigns. Results from a small-scale survey of "at-risk" youth indicate that African American adolescents exhibit optimistic bias, believing they are less likely than peers to become pregnant (or cause a pregnancy). Findings indicate that optimistic bias is linked to sexual risk-taking in youth, sexual intentions, and attitudes toward sexual activity. Although the current study is one of the first to include minority youth and one of the first to confirm a relationship between optimistic bias and risk behaviors, the findings suggest a promising course of action in reducing risky sexual practices among youth and, eventually, teen pregnancies. (Contains 62 references.) (Author)

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It Won't Happen to Me:

The Role of Optimistic Bias in African-American Teens' Risky Sexual Practices

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It Won't Happen to Me:

The Role of Optimistic Bias in African-American Teens' Risky Sexual Practices

Discovering why adolescents take sexual risks, despite knowledge of consequences, is a vital first step in combating the problem. Optimistic bias, the misperception that one is less likely than others to experience negative consequences from health behaviors, offers a promising explanation for adolescents' sexual risk-taking. Unfortunately, optimistic bias research has over-emphasized convenient college student samples and neglected adolescents and minorities populations targeted with the actual campaigns. Results from a small-scale survey of "at-risk" youth indicate that African-American adolescents exhibit optimistic bias, believing they are less likely than peers to become pregnant (or cause a pregnancy). Findings indicate that optimistic bias is linked to sexual risk-taking in youth, sexual intentions, and attitudes toward sexual activity. Although the current study is one of the first to include minority youth and one of the first to confirm a relationship between optimistic bias and risk behaviors, the findings suggest a promising course of action in reducing risky sexual practices among youth and, eventually, teen pregnancies.

Introduction

Optimistic bias (Weinstein, 1980) research has flourished in the past two decades, but the hundreds of published studies have virtually ignored minority youth. Optimistic bias suggests that individuals underestimate their personal risk to health hazards in relation to their peers. Studies in the U.S. and abroad indicate that adolescents are aware of the risks associated with reckless sexual behavior (Fisher & Misovich, 1991; Nduati & Kiai, 1997; Roscoe & Kruger, 1990), yet do not change such behaviors despite the efforts of mass media campaigns and educational programs (DiClemente, 1990; Donovan, 1997; Nduati & Kiai, 1997). Optimistic bias offers a promising explanation for this phenomenon.

Sexual Risk Taking Among Adolescents

Health professionals and researchers are becoming increasingly concerned about sexually transmitted diseases (STDs), AIDS in particular, among the adolescent population (CDC, 1999). Consider the following: the percentage of sexually active

adolescents has *increased* over the past few decades. In the 1950s, less than 60% of adolescents were unmarried at the time of their first intercourse; in the mid 1980s, that percentage increased to 95% (Guttmacher, 1994). From the 1970s to the 1980s, the percentage of sexually active school aged adolescents jumped from 29% to 52% for girls and 55% to 64% for boys (Guttmacher, 1994).

Children and adolescents accounted for 590,000 new cases of HIV/AIDS (World Health Report, 1998) in 1997, and 505,000 live births in 1996, accounting for about 13% of births in the U.S. (Monthly Vital Statistics Report, 1996). Pregnant teens have reported not using contraception because they did not know they could get pregnant (Pete & DeSantis, 1990). Rates of infectious syphilis and gonorrhea are highest for adolescents and decrease exponentially with increasing age (CDC, 1999). According to the Centers for Disease Control and Prevention, almost one million Americans are infected with HIV. AIDS is the leading cause of death in 25-to-44 year-old people and the second leading cause of death for adolescents. African-Americans have been especially hard hit, representing 13% of the population and 36% of AIDS cases (CDC, 1999). World-wide epidemiological data demonstrates that two out of every three HIV infected individuals acquired infection during adolescence (World Health Report, 1998), leading some to call the period between 5 and 15 years the "window of hope" (Nduati & Kiai, 1997).

Minority "At-Risk" Youth: A Special Case

One barrier to using optimistic bias research to understand youth is that research has relied on Euro-American college student or adult samples. Few researchers studied adolescents (Hingson, Strunin, Berlin, & Heeren, 1990; Whalen, Henker, O'Neil, Hollingshead, Hoilman, & Moore, 1994; Welkenhuysen, Everkiebooms, Decruyenaere,

& Vandenberghe, 1996), and fewer still studied minorities (Ellen, Boyer, Tschawn, & Shafer, 1996; Goodloe, Tross, Abdul-Quadar, Des Jarais, & Rosenblum, 1990).

The neglect of middle school and high school populations is especially problematic because they represent the best possible samples to gain understanding about sex risk perception, because this is where life-time habits are formed (Fleming, 1996; Greenberg, Brown, & Buerkel-Rothfuss, 1993; Kegeles, Adler & Irwin, 1988).

The over-reliance on Euro-American samples is problematic as well because adolescents of different races and cultural backgrounds initiate sex risk behaviors for different reasons and at different times (Nduati & Kiai, 1997; Udry, 1988; Udry & Billy, 1987). African-American adolescents, regardless of gender, report having sex at an earlier age than Latin-American or Euro-American adolescents do (Guttmacher, 1994). The only optimistic bias study which included college students of multiple racial backgrounds, found that Euro-Americans, African-Americans, and Latin-Americans all exhibited optimistic bias about their ability to avoid HIV infection, but in varying degrees (Ellen, Boyer, Tschann, & Shafer, 1996). Of particular interest, only Euro-American students used race as a basis for risk perception, believing themselves at less risk than students of other races. What cultural or environmental factors caused such differences in perceptual bias across the three races is unclear. One possible explanation is urbanization, because urban youth are more likely to take sex risks at earlier ages and are more likely to drop out of school than their suburban and rural counterparts (Coleman, 1997). Without continued research, understanding racial and cultural differences in optimistic bias is not possible.

The lack of information about urban, minority adolescents needs to be rectified. Given the differences described above in sexual initiation, activity and risk perception, the neglect of minority "at-risk" youth in optimistic bias is a valid research concern. Because Euro-American college students or adults were subjects in most studies of optimistic bias, it is uncertain whether the results generalize to minority adolescents. From the only study to include both adolescent and adult respondents, it appears that optimistic bias increases with age (Quadrel, Fischoff, & Davis, 1993). If this is this case, studies with children and adolescents may be able to pinpoint the optimum age range for educational campaigns *before* optimistic bias emerges.

Adolescent Sexual Risk Perception

One possible explanation for adolescents' sexual risk-taking is the invulnerability hypothesis, which states that adolescents take risks because they ignore or greatly underestimate the actual risks associated with the behavior in question. Adolescent egocentrism (Elkind, 1967) is described as the failure to differentiate between the cognitive concerns of others and those of the self. Adolescents use this ability to think about others' thoughts. The "Personal Fable" results from adolescents overdifferentiating their own thoughts, feelings, and experiences from those of others. Each adolescent views himself or herself as "special" or the exception to the rule. These "special" or unique qualities may lead adolescents to the conclusion that "others" routinely suffer the consequences from careless behaviors, while they remain the exception. Researchers such as Kisker (1985) and Tauer (1983) built on Elkind's conception of adolescent invulnerability to provide one possible explanation for reckless sexual behavior: adolescents believe negative outcomes won't happen to *them*.

More recent work under the ego-centrism umbrella supports the notion that developmental stages predict attitudes toward participation in risky behaviors (Greene, Rubin, & Hale, 1995; Greene, Rubin, Hale, & Walters, 1996; Saltz, Perry, & Cabral, 1994). The work of Greene et al. (1996) is especially relevant here; of the three personal fable subscales (Uniqueness, Invulnerability, and Omnipotence), perceived invulnerability had the most negative impact on adolescent health behaviors. High school students highest in perceived invulnerability also perceived themselves as less susceptible to sexual risks. The same students also reported less intention to avoid risk behaviors. Students higher in perceived invulnerability also reporter greater numbers of sexual partners in the past two months.

Weinstein (1980) labeled such beliefs as optimistic bias, a perceptual bias that one is less prone than others to negative outcomes from health hazards. According to this perspective, individuals are aware of the risks associated with sexual activity, but envision themselves the exception, not the rule, for any number of reasons like "I know my partner," "He/she hasn't been with many others," "He/she is a clean, decent person," etc.

Understanding adolescents' risk perception is an important first step in prevention of AIDS among youth because people act on their perceptions. In a review of adolescents and sexual risk taking research, DiClemente (1990) concluded that perceived risk was a better predictor of condom use than actual risk. Recent studies concur with DiClemente's conclusion (Breakwell & Millward, 1997; Hardeman, Pierro, & Mannetti, 1997; Serovich & Greene, 1997). Thus, to understand sexual risk-taking among adolescents, one must first understand adolescent risk-perception. Murphy, Rotheram-Borus, and Reid (1998)

extend previous research, finding that perceived peer norms also predict sexual activity among youth.

Purposes of the Study

First, the study seeks to document optimistic bias in an urban, minority, "at-risk" youth sample. Identification of such phenomenon is especially important in adapting safer-sex messages to specific audiences, especially youth who are currently taking sexual risks at increasingly younger ages than in the past.

The study is also one of the first of its kind to investigate the influence of optimistic bias on sexual attitudes, intentions, and behaviors of "at-risk" youth.

Optimistic Bias

Objective and subjective risk are quite different. Weinstein (1980, 1982, 1983, 1987, 1989) shows that individuals make comparative risk assessments in an egocentric manner, paying little attention to the risk status of others when asked to determine their own relative risk. Weinstein originally labeled this phenomenon "optimistic bias". In lay terms, individuals believe they are less vulnerable to risks than others. Optimistic bias is a robust finding and has been replicated in a variety of contexts, including HIV/AIDS risk (Chapin, 2000; Ellen, Boyer, Tschann & Shafer, 1996; Harris, 1996), sexually transmitted disease (STD) risk (Kaplan & Shayne, 1993; Turner, 1993), pregnancy risk (Eldridge, Lawrence, Little, Shelby & Brasfield, 1995; Smith, Gerrard, & Gibbons, 1997), cancer risk (Aiken, Febaughty, West, Johnson, & Luckett, 1995; Clarke, Williams, & Arthey, 1997; Fontaine & Smith, 1995), smoking risk (Clarke et al., 1997; Segerstrom, McCarthy, Caskey, Gross, & Jarvik, 1993; Strecher, Kreuter & Korbin, 1995), substance abuse risk (Hansen, Raynor, & Wolkenstein, 1991; Miller, 1991), future life events

(Klaczynski & Fauth, 1996; Weinstein, 1980), and general health risks (Glanz & Yang, 1996; Hoorens, 1996).

Optimistic Bias and Sexual Risk-Taking Behavior

Although optimistic bias is well documented, less is known about how individuals act on their perceptions. Brickner and associates (1987) report that condom use is better predicted by women's perception of their risk of pregnancy (optimistic bias), than by their actual risk. Optimistic bias has also been shown to predict risky sexual behaviors (Moore & Rosenthal, 1991) and smoking behaviors (McCoy, Gibbons, Gerrard, & Sufka, 1992). Moore and Rosenthal (1991) reported that a "surprisingly" large group of respondents engaged in risky sexual behavior saw themselves at very low risk. McCoy and colleagues (1992) reported similar findings for smoking risk. Smokers drawn from a community sample exhibited optimistic bias (believing they were less at risk than the "typical" smoker), while smokers working through a clinic to break the habit, exhibited no bias regarding their risk of smoking-related problems. However, others have reported mixed or non-significant results (Brickner et al., 1987; Cohen & Cecil, 1982; Ellen, Boyer, Tschann, & Shafer, 1996; Pennigroth, 1995), suggesting bias does not predict risky behavior.

In addition to examining a relationship between perceptual bias and risk-taking behavior, it is also important to consider the reverse possibility: that lack of experience with a hazard increases bias. Of more than a dozen studies to consider this relationship, only one (Langley & Williams, 1992) fails to demonstrate a relationship between experience and optimistic bias. Despite the consistent findings, the relationship is complex. For instance, being in an automobile accident or getting pregnant unexpectedly

decreases optimism in subsequent risk perception, but individuals who practice risk behaviors without experiencing negative consequences reinforce and increase their bias. As Weinstein (1989) puts it, "if it hasn't happened yet, it won't happen." The relationship between optimistic bias and sexual risk behaviors is especially important in the context of "at-risk" youth, where lack of experience or negative consequences is a function of age alone. Such a connection has the potential to decrease sexual risk behaviors among youth by first decreasing the perceptual bias.

Hypotheses

Theory discussed in the previous sections leads to several hypotheses related to optimistic bias in the context of sex risk perception. Hypotheses are summarized here in the order they will be tested and presented. Concerning the presence of optimistic bias in an urban, minority, "at-risk" sample and the influence of individual differences on optimistic bias, the following hypotheses are proposed:

Hypothesis 1: Adolescents believe they are less likely than others to get pregnant (or cause a pregnancy).

Hypothesis 2: Sexually experienced adolescents will exhibit higher degrees of optimistic bias than will sexually inexperienced adolescents.

Research Question 1: What is the relationship between optimistic bias, frequency of sexual activity, sexual attitudes, and intentions to become sexually active?

Methods

To test the hypotheses, a small-scale survey was administered to a sample of minority "at-risk" youth ages 10 through 17 in Trenton, New Jersey. Trenton is a low-income community with health statistics among the worst in the state. Trenton has one of

the highest rates for communicable diseases, including sexually transmitted diseases (Coleman, 1997). The age groups selected are consistent with the adolescent egocentrism literature, which suggests that the differentiation between perceptions of the self and others (typical of personal fables) emerges around the age of 11 or 12 and begins to decline around 16 or 17.

Three programs that service "at-risk" elementary, middle, and high-school students in Trenton were selected as the study site. School counselors and social service agencies identified potential students.

All three programs were included in the study to maximize age range; however, due to differences in program sizes, the sample over-represents middle school students (grades 6-8). Parents of 98% of the enrolled students gave consent for their child(ren)'s participation in the study. Student consent/assent (students under the age of 12 may not give "consent") was obtained prior to each data collection as well, giving students the opportunity to refuse or discontinue participation prior to (or during) the session. Of the 225 students with parental consent, 98% agreed to participate in the study. Because the study was longitudinal in nature, some students left the program and others joined throughout the study period. Most analyses here are based on the 180 students present over time. The students ranged in age from 10 to 17 ($\underline{M}$ = 12.5, $\underline{SD}$ = 1.9). Students under the age of 12 were asked about sexual intentions and attitudes, but not actual behaviors, so some analyses are based on a smaller sample (134). The sample was 54% female and 92% African-American.

Dependent Variable

Optimistic Bias

Optimistic bias was measured with a standard instrument designed by Weinstein (1987). The procedure asked students to compare their relative risk of pregnancy with peers. Students were asked, "compared to my best friend, my chances of getting pregnant (causing a pregnancy) are ___." Following Weinstein's (1987) method, comparative risk assessment was measured on a 7-point scale (-3 = "much less" than other students in the USA, +3 = "much greater" than other students in the USA). A mean of zero would indicate no bias, either optimistic or pessimistic on the group level.

Independent Variables

The independent variables in this study, listed in order of the hypotheses were: (a) sexual behavior, (b) sexual intentions, and (c) attitudes toward sexual behavior.

Sexual Behavior (past risk)

Students indicated whether they had ever tried: (a) having "unprotected" sex (without a condom) or (b) having "protected" sex (with a condom).

Sexual Behavior (present risk)

Students were also asked to estimate the number of days they had engaged in both sexual behaviors in the last 30 days. Five response categories were provided: none, 1-2 days, 3-10 days, 11-20 days, almost every day. Such a measure of risk is consistent with a measure of adolescent risk-taking developed by Arnett (1996).

Sexual Intentions (intended future risk)

A third set of risk-taking items was created to measure projected risk. Students were asked to estimate the number of years that would pass before becoming sexually

active (if they were not yet active). Regardless of current sexual activity, students were also asked to indicate on a four-point scale (0 = definitely no, 3 = definitely yes), if they intended to be sexually active during high school.

Sexual Attitudes

Two items were asked of all students to establish attitudes and perceived norms of sexual activity: (a) "When do you think it is OK to start having sex?" and (b) "When do you think MOST people start having sex?" Both items offered forced choices including "in middle school," "in high school," "after high school," and "after marriage."

Findings

Optimistic bias in a group is demonstrated by a group mean significantly less than zero. Hypothesis 1 predicted that urban, minority, "at-risk" youth would believe they were less likely than others to become pregnant (or cause a pregnancy). A single-sample t-test was used to test the hypothesis that the mean of optimism was significantly different from zero. As predicted in H1, the students exhibited optimistic bias, t (174) = -6.77, $p < .001$. Students perceived they were less likely than their peers to become pregnant or cause a pregnancy. This finding is consistent with the existing optimistic bias literature.

Because the mean for optimism (-1.0, SD = 1.9) on a possible range from -3 to +3 was significantly less than zero, the term "optimistic bias" will be used throughout the current study to describe personal vs. other risk assessments. This guideline is consistent with current practices (e.g., Weinstein, 1989).

Hypothesis 2 predicted that sexually experienced adolescents would exhibit higher degrees of optimism than would sexually inexperienced adolescents. Recall that

the mean age of the students in the sample was 12.5: 32% of the sample reported having protected sex (with a condom) at least once, and 27% reported having unprotected sex at least once. Thus, sexually-active youth are not likely to use condoms consistently. The average age of sexually active students was 12. There was no significant relationship between age and sexual activity, either with or without a condom. As predicted in H2, sexually experienced adolescents (M = -1.64) were more optimistic than sexually inexperienced adolescents (M = .52) regarding their personal pregnancy risk, $t(71) = -5.43$, $p < .001$.

Research question 1 was exploratory in nature, seeking to explore the relationship between optimistic bias, frequency of sexual activity, sexual attitudes, and intentions to become sexually active. Table 1 indicates that that such a relationship exists. About 27% of the variance in the amount of recent protected sex may be attributed to optimistic bias. It is also interesting to note that students recently engaged in unprotected sex tend to be less optimistic than those who have recently used condoms. Approximately 26% of the students reported engaging in sexual activity with a condom in the past 30 days; 14% reportedly had sex with a condom more than once in the past 30 days, and 2% reportedly had sex with a condom weekly. Fewer students reported having sex without a condom in the past 30 days: 14% at least once, 3% more than once, and 1% weekly.

In addition to the predicted relationships, Table 1 also suggests a relationship between sexual behavior and attitudes and intentions. About half of the students (49%) stated that it was OK to have sex only after marriage; however, 51% believed that "most" people began having sex in middle-school. Only 10% believed that most people initiated sexual activity after high-school. The majority of the students (58%) stated the intention

of being sexually active in high-school. Intention to become sexually active in high school was best predicted by sexual attitudes (52% shared variance), but also by optimistic bias (12% shared variance). The relationship between sexual attitudes and behaviors is quite consistent with the existing literature. The current findings suggest that optimistic bias should also be considered in future research.

Discussion

Discovering why adolescents take sexual risks, despite knowledge of the consequences, is a vital first step in combating the problem. Consistent with the optimistic bias hypothesis, findings from the current study indicate that minority youth are sexually active, do not use condoms consistently, and believe they will not become pregnant or cause a pregnancy to occur. Minority adolescents today believe their peers become sexually active at early ages and engage in risky behaviors. This perception is coupled with the misperception that they are not personally susceptible to pregnancy or health risks. Given the mean age of sexually active adolescents in the study (12), the "window of hope" (5 to 15) may need to be lowered.

Implications for educational programs and health campaigns emerge, in that changing perceived peer norms, changing sexual attitudes, and reducing perceptual bias may also reduce youthful sexual risk taking. Such campaigns would be youth/peer oriented. Highly visible health campaigns in the past have raised awareness, but have had little impact on adolescent behaviors. It has been argued that such programs fail because they fail to take into account developmental characteristics of their audience (Saltz, Perry, & Cabral, 1994). Adolescents, quite aware of the risks of sexual behaviors, continue in those behaviors despite the awareness campaigns (Chapin, 2000). If a person truly

believes that they cannot get pregnant/cause a pregnancy or contract a STD or AIDS, the current health campaigns have little chance of affecting change (Boyer & Hein, 1991; Greene et al., 1995). Health campaigns need to take developmental stages and cultural differences into consideration to create personalized, participatory strategies. The optimistic bias literature would suggest that only personalized messages in which audience members can identify with others would allow individuals to personalize (thus share) the risk. An example of such a campaign (Saltz, Perry, & Cabral, 1994) reported greater intentions toward abstinence among high school students following pregnancy-related role-plays and watching videos of peer's role-plays. Such endeavors should be more indicative of the health campaigns of the future.

Additionally, informing students of current trends in risk reduction among peers may reduce the misperceptions of peer norms which favor risk-practices. Campaigns designed to incorporate optimistic bias would emphasize personal risk over high-risk groups and behaviors. Identification with spokespeople requires variance in the age, race, gender, and cultural background of featured individuals. The message must be straightforward and clear: "I'm like you. It can happen to you because it happened to me."

Findings from the current study should be interpreted with caution, due to the small sample size and its unique characteristics (age and cultural background). While addressing the neglect of adolescents and minorities in the optimistic bias literature and indicating cultural differences in the perceptual bias, the findings from this study may be less generalizable to different cultural and age groups. Only studies including numerous

age and cultural groups will be able to pinpoint the origin of optimistic bias, its impact on various groups, and its relationship with sexual activity.

The findings from the current study are significant because it is one of the first to include minority "at-risk" youth and one of the first to link optimistic bias to sexual risk taking within this context. Consistent with previous research, sexual attitudes are strongly related to sexual risk-taking.

REFERENCES

Aiken, L., Fenaughty, A., West, S., Johnson, J. & Luckett, T. (1995). Perceived determinants of risk for breast cancer and the relations among objective risk, perceived risk, and screening behavior over time, Women's Health, 1, 27-50.

Arnett, J. (1996). Metalheads: Heavy metal music and adolescent alienation. Boulder, CO: Westview.

Boyer, C. & Hein, K. (1991). AIDS and HIV infection in adolescents: the role of education and antibody testing. In R. Lerner, A. Petersen, & J. Brooks-Gunn (Eds.) Encyclopedia of adolescence (pp. 37-43). New York: Garland.

Breckwell, G., & Millward, L. (1997). Sexual self-concept and sexual risk-taking, Journal of Adolescence, 20, 29-41.

Brickner, P. Lawton, A., & Philliber, S. (1987). Teenagers' perceived and actual probabilities of pregnancy, Adolescence, 22(86), 475-485.

Centers for Disease Control (CDC) (1999) Division of STD/HIV annual report. Washington, D.C.

Chapin, J. (2000). Third-person perception and optimistic bias among urban minority at-risk youth, Communication Research, 27 (1), 51-81.

Clarke, V., Williams, T., & Arthey, S. (1997). Skin type and optimistic bias in relation to the sun protection and sun tanning behaviors of young adults, Journal of Behavioral Medicine, 20(2), 207-222.

Cohen, M. & Cecil, J. (1982). Number of independent variables in the regression based prediction of oral health, Community Dentistry and Oral Epidemiology, 10(5), 268-271.

Coleman, G. (1997). Project S.M.I.L.E. continuation report. Submitted to the New Jersey Commission on Higher Education.

DiClemente, R. (1990). Adolescents and AIDS: Current research, prevention strategies and public policy. In L. Temoshok & A. Baum (Eds.) Psychological aspects of AIDS and HIV disease. Hillsdale, NJ: Erlbaum, 52-64.

Donovan, B. (1997). Global sex survey. British Journal of Hospital Medicine, 54(11), 575-8.

Eldridge, G., Lawrence, J., Little, C., Shelby, M & Brasfield, T. (1995). Barriers to condom use and barrier method preferences among low-income African-American women, Women and Health, 23 (1), 73-89.

Elkind, D. (1967). Egocentrism in adolescence, Child Development, 38, 1024-1038.

Ellen, J., Boyer, C., Tschann, J & Shafer, M. (1996). Adolescents' perceived risk for STD and HIV infection, Journal of Adolescent Health, 18 (3), 177-181.

Fisher, J. & Misovich, S. (1991). Evolution of college students' HIV related behavioral responses, attitudes, knowledge, and fear. HIV Education and Prevention, 2 322-337.

Fleming, M. (1996). Healthy youth 2000: Amid-decade review. Chicago: Department of Adolescent Health & the American Medical Association.

Fontaine, K & Smith, S. (1995). Optimistic bias in cancer risk perception: A cross national study, Psychological Reports, 77 (1) 143-146.

Glanz, K & Yang, H. (1996). Communicating about the risk of infectious diseases, Journal of the American Medical Association, 275 (3), 253.

Goodloe, L., Tross, S., Abdul-Quadar, A., Des Jarais, D. & Rosenblum, A. (1990), Ethnic differences in HIV knowledge and health beliefs, Narcotic and Drug Research, 6 (3), 225-235.

Greenberg, B., Brown, J., & Buerkel-Rothfuss, N. (1993). Media, sex, and the adolescent. Cresskill, NJ: Hampton Press.

Greene, K., Rubin, D., & Hale, J. (1995). Egocentrism, message explicitness, and AIDS messages directed toward adolescents: An application of the theory of reasoned action. Journal of Social Behavior and Personality, 10 (3), 547-570.

Greene, K., Rubin, D., Hale, J. & Walters, L. (1996). The utility of understanding adolescent egocentrism in designing health promotion messages. Health Communication, 8 (2), 131-152.

Guttmacher, A. (1994). Sex and American teenagers. New York: Guttmacher Institute.

Hansen, W., Raynor, A. & Wolkenstein, B. (1991). Perceived personal immunity to the consequences of drinking alcohol: The relationship between behavior and perception, Journal of Behavioral Medicine, 14, 205-225.

Hardeman, W., Pierro, A., & Mannetti, L. (1997). Determinants of intentions to practice safe sex among 16-25 year-olds, Journal of Community & Applied Social Psychology, 7(5), 345-360.

Harris, P. (1996). Sufficient grounds for optimism: The relationship between perceived controllability and optimistic bias, Journal of Social and Clinical Psychology, 15 (1), 9-52.

Hingson, R., Strunin, L., Berlin, B., & Heeren, T. (1990). Beliefs about AIDS, use of alcohol and drugs, and unprotected sex among Massachusetts adolescents. American Journal of Public Health, 80(3), 295-299.

Hoorens, V. (1996). Self-favoring biases for positive and negative characteristics: Independent phenomena? Journal of Social and Clinical Psychology, 15, 53-67.

Kaplan, B. & Shayne, V. (1993). Unsafe sex: Decision making bias and heuristics, US AIDS Education and Prevention, 5(4), 294-301.

Kegeles, S., Adler, N., & Irwin, C. (1988). Sexually active adolescents and condoms: Changes over one year in knowledge, attitudes and use. American Journal of Public Health, 78, 460-461.

Kisker. E. (1985). Teenagers talk about sex, pregnancy, and contraception. Family Planning Perspectives, 17, 83-90.

Klacynski, P. & Fauth, J. (1996). Intellectual ability, rationality, and intuitiveness as predictors of warranted and unwarranted optimism for future life events, Journal of Youth and Adolescence, 25(6), 755-819.

Langley, J. & Williams, S. (1992). Cycling health beliefs, crash experiences and night cycling behavior, Journal of Pediatrics and Child Health, 28 (3), 231-235.

McCoy, S., Gibbons, F., Reis, T., Gerrard, M., Luus, E., & Suffka, A. (1992). Perceptions of smoking risk as a function of smoking status. Journal of Behavioral Medicine, 15 (5), 496-488.

Miller, C. (1991). Risk perception: An investigation of its accuracy and impact, Dissertation Abstracts International, 52 (01B), 523.

Monthly vital statistics report (1996) 46(1)

Moore, S. & Rosenthal, D. (1991). Adolescent invulnerability and perceptions of AIDS risk, Journal of Adolescent Research, 6(2), 164-180.

Murphy, D., Rotheram-Borus, & M., Reid, H. (1998). Adolescent gender differences in HIV-related sexual risk acts, social-cognitive factors and behavioral skills, Journal of Adolescence,21(2), 197-208.

Nduati, R. & Kiai, W. (1997). Communicating with adolescents about AIDS. Paris: IDRC.

Pennigroth, S. (1995). Perceived vulnerability and optimistic bias in skin cancer prevention among adolescents, Dissertation Abstracts International, 56 (09B), 5213.

Pete, J. & DeSantis, L. (1990). Sexual decision making in young black adolescent females. Adolescence, 25(97), 145-154.

Quadrel, M., Fischoff, B., & Davis, W. (1993). Adolescent (in) vulnerability, American Psychologist, 48(2), 102-116.

Roscoe, B. & Kruger, T. (1990). HIV: late adolescents' knowledge and its influence on sexual behavior. Adolescence, 25, 39-48.

Saltz, E., Perry, A., & Cabral, R. (1994). Attacking the personal fable: Role-play and its effect on teen attitudes toward sexual abstinence. Youth and Society, 26 (2), 223-242.

Segerstrom, S., McCarthy, W. & Caskey, N. (1993). Optimistic bias among cigarette smokers, Journal of Applied Social Psychology, 23, 1606-1618.

Serovich, J. & Greene, K. (1997). Predictors of adolescent sexual risk: Taking behaviors which put them at risk for contracting HIV, Journal of Youth and Adolescence, 26, 428-444.

Smith, G., Gerrard, M. & Gibbons, F. (1997). Self-esteem and the relation between risk behavior and perceptions of vulnerability to unplanned pregnancy in college women, Health Psychology, 16(2), 137-146.

Strecher, V. Kreuter, M. & Kobrin, S. (1995). Do cigarette smokers have unrealistic perceptions of their heart attack, cancer an stroke risks, Journal of Behavioral Medicine, 18(1), 45-54.

Tauer, K. (1983). Promoting effective decision making in sexually active adolescents. Nursing Clinics of North America, 18(2), 275-292.

Turner, J. (1993). Teenage sexual risk-taking and perceived invulnerability: The influence of adolescent egocentrism, Dissertation Abstracts International, 54 (07A), 2752.

Udry, J. (1988). Biological predispositions and social control in adolescent sexual behavior. American Sociological Review, 53, 207-232.

Udry, J. & Billy, J. (1987). Initiation of coitus in early adolescence. American Sociological Review, 52, 841-855.

Weinstein, N. (1989). Effects of personal experience on self-protective behavior. Psychological Bulletin, 105(1), 31-50.

Weinstein, N. (Ed.) (1987). Cross-hazardous consistencies: Conclusions about self-protective behavior, Taking care: Understanding and encouraging self-protective behavior. New York: Cambridge University Press. 325-335.

Weinstein, N. (1987). Unrealistic optimism about susceptibility to health problems: Conclusions from a community-wide sample. Journal of Behavioral Medicine, 10(5) 481-500.

Weinstein, N. (1983). Reducing unrealistic optimism about illness susceptibility. Health Psychology, 2, 11-20.

Weinstein, N. (1982). Unrealistic optimism about susceptibility to health problems. Journal of Behavioral Medicine, 5, 441-460.

Weinstein, N. (1980). Unrealistic optimism about future life events. Journal of Personality and Social Psychology, 39, 806-460.

Welkenhuysen, M., Everkiebooms, G., Decruyenaere, M. & Vandenberghe, H. (1996). Unrealistic optimism and genetic risk, Journal of Psychology and Health, 11(4), 479-492.

Whalen, C., Henker, B., O'Neil, R., Hollingshead, J., Holman, A. & Moore, B. (1994). Optimism in children's judgments of health an environmental risks, Health Psychology, 4(4), 319-325.

World Health Report (1998). Atlanta, GA: U.S. Department of Health and Human Services.

Table 1

Zero-Order Correlations Among Optimistic Bias and Sexual Activity

	2	3	4	5
1. Optimistic bias	.52***	.31**	-.32***	.34***
2. Protected sex	---	.40***	-.37**	.37**
3. Unprotected sex		---	-.18	.20
4. Sexual attitudes			---	-.72***
5. Projected sexual activity				---

**p< .01. ***p< .001.

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